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Mar 05

# A L E R T P E R I O D S The International Space Environment Service

MARCH 2005

Julian Day	Date of Issue	Date of Obs	Wolf No.	10-cm Solar Flux	A-index	Rgn No.	Location		Flares			Date of Fcst	Region Fcst(1)	Geoadvice(1)
							Lat	Lon	Opt	M	X			
060	01	28	11	75	12	10739	S04	E21	0	0	0	01	Q	SOL: Quiet
									0	0	0	01		MAG: Active
									0	0	0	01		PRO: Quiet
061	02	01	11	74	10	10739	S03	E10	0	0	0	02	Q	SOL: Quiet
									0	0	0	02		MAG: Quiet
									0	0	0	02		PRO: Quiet
062	03	02	11	75	12	10740	S07	W24	0	0	0	03	Q	SOL: Quiet
									0	0	0	03		MAG: Quiet
									0	0	0	03		PRO: Quiet
063	04	03	24	77	4	10739	S03	W16	0	0	0	04	Q	SOL: Quiet
						10740	S07	W37	0	0	0	04	Q	MAG: Quiet
									0	0	0	04		PRO: Quiet
064	05	04	13	79	2	10741	N12	E70	0	0	0	05	Q	SOL: Quiet
									0	0	0	05		MAG: Quiet
									0	0	0	05		PRO: Quiet
065	06	05	22	81	9	10741	N12	E57	0	0	0	06	Q	SOL: Eruptive
									0	0	0	06		MAG: Quiet
									0	0	0	06		PRO: Quiet
066	07	06	22	84	29	10741	N12	E44	1	0	0	07	Q	SOL: Eruptive
									0	0	0	07		MAG: Active
									0	0	0	07		PRO: Quiet
067	08	07	43	87	36	10739	S04	W67	0	0	0	08	Q	SOL: Quiet
						10741	N13	E30	0	0	0	08	Q	MAG: Minor
						10742	S05	E67	0	0	0	08	Q	PRO: Quiet
068	09	08	52	94	23	10739	S07	W81	0	0	0	09	Q	SOL: Quiet
						10741	N14	E17	0	0	0	09	Q	MAG: Active
						10742	S06	E56	0	0	0	09	Q	PRO: Quiet
069	10	09	77	100	22	10739	S08	W92	0	0	0	10	Q	SOL: Eruptive
						10741	N12	E03	3	0	0	10	Q	MAG: Active
						10742	S06	E43	0	0	0	10	Q	PRO: Quiet
						10743	S09	E76	0	0	0	10	Q	
070	11	10	70	102	12	10741	N13	W11	0	0	0	11	Q	SOL: Eruptive
						10742	S05	E31	0	0	0	11	E	MAG: Quiet
						10743	S07	E63	0	0	0	11	Q	PRO: Quiet
071	12	11	59	105	7	10741	N12	W26	0	0	0	12	Q	SOL: Eruptive
						10742	S05	E17	0	0	0	12	E	MAG: Quiet
						10743	S07	E50	0	0	0	12	Q	PRO: Quiet
072	13	12	67	110	6	10741	N12	W41	0	0	0	13	Q	SOL: Eruptive
						10742	S06	E03	0	0	0	13	Q	MAG: Quiet
						10743	S08	E36	0	0	0	13	Q	PRO: Quiet
073	14	13	77	114	8	10741	N12	W57	0	0	0	14	Q	SOL: Eruptive
						10742	S05	W12	0	0	0	14	Q	MAG: Quiet
						10743	S07	E24	0	0	0	14	Q	PRO: Quiet
074	15	14	49	112	22	10741	N12	W68	0	0	0	15	E	SOL: Eruptive
						10742	S05	W24	1	0	0	15	Q	MAG: Quiet
						10743	S07	E10	0	0	0	15	Q	PRO: Quiet
075	16	15	58	108	4	10741	N10	W80	1	0	0	16	E	SOL: Eruptive
						10742	S05	W39	0	0	0	16	Q	MAG: Quiet
						10743	S08	W04	0	0	0	16	Q	PRO: Quiet
076	17	16	45	105	7	10742	S06	W50	1	0	0	17	Q	SOL: Eruptive
						10743	S08	W17	0	0	0	17	Q	MAG: Quiet

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Julian Day	Date of Issue	Date of Obs	Wolf No.	10-cm Solar Flux	A-index	Rgn No.	Location		Flares			Date of Fcst	Region Fcst(1)	Geoadvice(1)
							Lat	Lon	Opt	M	X			
									0	0	0	17		PRO: Quiet
077	18	17	35	101	13	10742	S06	W65	2	0	0	18	Q	SOL: Eruptive
							10743	S08	W31	0	0	18	Q	MAG: Quiet
									0	0	0	18		PRO: Quiet
078	19	18	37	96	9	10742	S06	W80	0	0	0	19	Q	SOL: Eruptive
							10743	S08	W44	0	0	19	Q	MAG: Quiet
									0	0	0	19		PRO: Quiet
079	20	19	41	93	14	10742	S06	W93	0	0	0	20	Q	SOL: Eruptive
							10743	S08	W57	1	0	20	E	MAG: Quiet
									0	0	0	20		PRO: Quiet
080	21	20	39	89	7	10743	S08	W70	1	0	0	21	E	SOL: Eruptive
							10744	S12	E01	0	0	21	Q	MAG: Quiet
									0	0	0	21		PRO: Quiet
081	22	21	53	90	10	10743	S08	W84	2	0	0	22	E	SOL: Eruptive
							10744	S12	W13	0	0	22	Q	MAG: Quiet
							10745	N12	E54	0	0	22	Q	PRO: Quiet
082	23	22	49	87	5	10743	S08	W96	0	0	0	23	Q	SOL: Eruptive
							10744	S13	W26	0	0	23	Q	MAG: Quiet
							10745	N12	E43	0	0	23	Q	PRO: Quiet
083	24	23	56	88	6	10744	S13	W40	0	0	0	24	Q	SOL: Quiet
							10745	N12	E30	0	0	24	Q	MAG: Quiet
							10746	S11	E07	0	0	24	Q	PRO: Quiet
084	25	24	57	87	4	10744	S13	W53	0	0	0	25	Q	SOL: Eruptive
							10745	N12	E15	1	0	25	Q	MAG: Quiet
							10746	S11	W06	0	0	25	Q	PRO: Quiet
085	26	25	65	82	15	10744	S14	W68	0	0	0	26	Q	SOL: Quiet
							10745	N12	E03	1	0	26	Q	MAG: Quiet
							10746	S12	W21	0	0	26	Q	PRO: Quiet
086	27	26	41	78	16	10745	N12	W11	0	0	0	27	Q	SOL: Quiet
							10746	S12	W35	0	0	27	Q	MAG: Quiet
									0	0	0	27		PRO: Quiet
087	28	27	35	78	12	10745	N12	W24	0	0	0	28	Q	SOL: Quiet
							10746	S11	W47	0	0	28	Q	MAG: Quiet
									0	0	0	28		PRO: Quiet
088	29	28	15	80	3	10745	N12	W39	0	0	0	29	Q	SOL: Quiet
									0	0	0	29		MAG: Quiet
									0	0	0	29		PRO: Quiet
089	30	29	15	79	4	10745	N12	W55	0	0	0	30	Q	SOL: Quiet
									0	0	0	30		MAG: Quiet
									0	0	0	30		PRO: Quiet
090	31	30	11	78	9	10745	N12	W68	0	0	0	31	Q	SOL: Quiet
									0	0	0	31		MAG: Quiet
									0	0	0	31		PRO: Quiet

## (1) Region Forecast and Flare (SOL) Advice

Q = Quiet (<50% probability of C-class flares)  
 E = Eruptive (C-class flares expected, probability >=50%)  
 A = Active (M-class flares expected, probability >=50%)  
 M = Major (X-class flares expected, probability >=50%)  
 P = Proton (Proton flares expected, probability >=50%)  
 W = Warning (activity levels are expected to increase, but no numerical forecast given)  
 / = No forecast available

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Magnetic (MAG) Geoadvice

'Quiet'		
'Active'	conditions expected	(A>= 20 or K =4)
'Minor'	storm expected	(A>= 30 or K =5)
'Major'	storm expected	(A>= 50 or K>=6)
'Severe'	storm expected	(A>=100 or K>=7)
'IP'	magstorm in progress	(A>= 30 or K>=4)
'Warning'	(activity levels are expected to increase, but no numerical forecast given)	
'/'	no forecast available	

Proton (PRO) Geoadvice

'Quiet'		
'Proton'	event expected	( 10pfu at > 10 MeV)
'Major'	proton event expected	(100pfu at >100 MeV)
'IP'	proton event in progress	(>10 MeV)
'Warning'	(activity levels are expected to increase, but no numerical forecast given)	
'/'	no forecast available	

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STRATWARM ALERTS  
STRATWARM ALERTS  
Termination of the STRATALERT Reports  
Stratospheric Research Group, FU Berlin

In the 1960s the stratospheric midwinter warmings were regarded as an exciting and interesting research problem. The observations taken during a warming were scarce but in great demand, and a much desired aim was to launch meteorological rockets when a warming was developing above a station. For this purpose an advisory system was necessary, such as had been established in the international geophysical community for other phenomena, the so-called GEOALERT. Charged by WMO (World Meteorological Organisation) the Stratospheric Research Group of the Freie Universität in Berlin got together with their colleagues of the American Weather Bureau and developed a warning system which was named STRATALERT. It was introduced in 1964 when the IQSY (International Year of the Quiet Sun) began (cf. ALERTING CRITERIA for more information).

The Berlin group was at first responsible for the European space, later for the whole Northern Hemisphere, and issued a STRATALERT report every day during winter, and when needed also a GEOALERT. The alerts were disseminated through the German Weather Service's international net and reached all interested parties everywhere. The STRATALERT reports were an essential source of information about what was going on in the stratosphere, information which at that time would not otherwise have been available to many scientists interested in current conditions. Because of this information it was possible to time experiments, for instance with meteorological rockets, to take place under desired conditions, and local observations could be fitted into and interpreted on the background of a wider field. This information system has served as a basis for decisions made in many large-scale field experiments. A review and classification of stratospheric warmings can be found in SPARC Newsletter No. 15, ( Labitzke and Naujokat, 2000, updated table 1).

The winter, 2003/2004, was the last STRATALERT winter. After 41 years we are sorry to announce that we cannot continue this timely warning system in its old format and we could not find a successor. For those who are interested in STRATALERT messages, we provide access to all available messages via ftp:  
<ftp://strat50.met.fu-berlin.de/pub/stratalert>

Those interested in the daily development of the stratospheric circulation can find some analyses and different stratospheric parameters based on the ECMWF-data here:  
<http://strat-www.met.fu-berlin.de/cgi-bin/winterdiagnostics>.  
The general evaluation is, however, left to the user.

Additional data links are (amongst others) available:

US National Centers for Environmental Prediction (CPC/NCEP):  
<http://www.cpc.ncep.noaa.gov/products/stratosphere>

Japan Meteorological Agency (JMA):  
<http://okdk.kishou.go.jp/products/clisys/STRAT>